Beyond Traditional LMR Radios: Moving to a Reliable Communication System

A Public Safety Expert Shares Communication Lessons School Districts Can Use to Enhance Technology from Buses to the Field



With the uncertain state of academic calendars across the country, school districts and their leadership continue to plan for the safety and security of students through a variety of learning models. No matter how students return to campuses in the fall—in-person, distance learning or a hybrid approach—streamlining communication is key for a successful year and safe transportation of hundreds of thousands of young students.

As a Retired Phoenix Fire Department Deputy Fire Chief, Amos Chalmers knows the importance of being able to communicate when safety and coordination is a top priority.

Chalmers spent two decades serving in various public safety operational and leadership positions, including overseeing a large dispatch center in Arizona. He brings this knowledge to his role at FirstNet, the wireless communications platform dedicated to public safety, advising on technology solutions that can help school districts improve communication.

1. Modern Applications Go Beyond Legacy Technology Capabilities

Traditional land mobile radio (LMR) two-way radio systems are a widely used tool for school transportation operations. Chalmers has witnessed the communication shortfalls associated with LMR use in public safety, including limited coverage and utility.

He says there's an opportunity for school districts to adopt a more integrated solution, such as AT&T's Enhanced Push-To-Talk (EPTT)—an application that enables clear communication on FirstNet's network that connects more than 12,000 public safety organizations and agencies across the U.S.

"EPTT technology offers a lot of capabilities that aren't a part of LMR systems today and that the school transportation community can greatly benefit from," shares Chalmers.





Reliable connectivity is an essential part of school transportation operations that LMR doesn't always provide. "LMR only reaches those contacts located within a certain area, even in large public safety communities with a massive radio network," says Chalmers.

He explains that drivers can lose radio signal in various situations, which makes interfacing with dispatch a challenge. This shortcoming is unacceptable when secure communication is required to provide important information about the status of the route or a student's location.



"EPTT extends LTE coverage past county lines, giving school districts access to a nationwide communication platform that allows them to coordinate daily and long-term logistics confidently, and something especially important when travelling out of the area for field trips and athletic games," he adds.





3. Innovation Enhances Safety in Any Situation

Similar to providing safe and effective response in public safety, delivering students to and from school safely is the number one priority of bus drivers. They need to be free of the distractions associated with using handheld radios, which don't always have functional designs.

"Since EPTT operates across different devices—transmitting communication from a handset installed mounting solution on the bus dashboard to other smart devices in the field—drivers can seamlessly communicate with dispatch over the FirstNet wireless network with one touch," says Chalmers.

This allows them to focus on operating the vehicle as safely as possible and increases efficiency in communication processes, providing confidence to school officials, parents and students alike.



4. Interoperability Improves Community Preparedness

"EPTT also provides one-to-one and one-to-many communications, allowing school districts to relay fleet-wide updates or individual updates to specific buses, something public safety agencies rely on regularly for quick and efficient communication" says Chalmers. "This helps dispatch manage routine routes or quickly re-direct certain buses in emergency situations."

This interoperability within school districts can also be expanded to community partners including public safety and healthcare agencies. Collaboration and response are improved by moving communication with these entities to AT&T's EPTT application.

Chalmers says this can positively impact a community-wide approach to managing bus operations, noting examples such as natural disasters like a hurricane or larger public health emergencies like the COVID-19 pandemic.



5. New Technology is a Priceless Investment

Public safety budgets are sometimes stretched thin to meet community demands and it's no different for school districts. LMR devices are expensive hardware to maintain. It's also costly to upgrade communication systems, but EPTT is a lower cost investment that can return dividends in the long run.

"EPTT" is an innovation that can save school districts money and improve communication in ways that were previously constrained," exclaims Chalmers.

That's why school districts should consider transitioning existing LMR radios to more adaptable and integrated applications like AT&T's EPTT—it's a smart move that can conserve financial resources for future student safety and transportation priorities.

EPTT In Action: Texas School District Responds to Critical Emergency

Shortly after Lindale Independent School District (ISD) in Northeast Texas implemented FirstNet and AT&T EPTT, it was put to good use when an emergency arose at a district elementary school. Students and faculty needed to be quickly and safely transported away from the facility due to a nearby unexpected gas leak.

Using the EPTT feature on his FirstNet device, the transportation director dispatched an alert, asking all bus drivers to respond immediately to transport individuals out of the area.

"With the help of FirstNet, we were able to safely evacuate 550 people, including faculty and students, to another campus in approximately 12 minutes," said Deputy Superintendent Jamie Holder.

